

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process for separating mixtures of isomeric pentenenitriles, in which at least one isomer is depleted from the mixture, which comprises effecting the separation of the mixtures of isomeric pentenenitriles selected from the group consisting of

- mixtures comprising 2-methyl-3-butenenitrile and 3-pentenenitrile,
 - mixtures comprising 2-methyl-3-butenenitrile and (Z)-2-methyl-2-butenenitrile,
 - mixtures comprising cis-2-pentenenitrile and 3-pentenenitrile and
 - mixtures comprising (E)-2-methyl-2-butenenitrile and 3-pentenenitrile
- distillatively by distilling under a pressure of from 0.001 to 1 bar.

2. (Original) The process according to claim 1, wherein at least two different isomers are separated.

3. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises 2-methyl-3-butenenitrile and 3-pentenenitrile and ~~stems is produced~~ from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst.

4. (Original) The process according to claim 3, wherein the proportion of 2-methyl-3-butenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of all pentenenitrile isomers in the mixture, and/or the proportion of 3-pentenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenenitrile isomers in the mixture.

5. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises 2-methyl-3-butenenitrile and (Z)-2-methyl-2-butenenitrile and ~~stems is produced~~ from an isomerization of 2-methyl-3-butenenitrile.

6. (Original) The process according to claim 5, wherein the proportion of 2-methyl-3-butenenitrile in the mixture is from 0.1 to 99% by weight, based on the sum of the pentenenitrile isomers in the mixture, and/or the proportion of (Z)-2-methyl-2-butenenitrile in the mixture is from 0.1 to 99% by weight, based on the sum of the pentenenitrile isomers in the mixture.

7. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises cis-2-pentenenitrile and 3-pentenenitrile and ~~stems~~ is produced from a reaction of 3-pentenenitrile with hydrogen cyanide over a hydrocyanation catalyst.

8. (Original) The process according to claim 7, wherein the proportion of cis-2-pentenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of pentenenitrile isomers in the mixture, and/or the proportion of 3-pentenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenenitrile isomers in the mixture.

9. (Currently amended) The process according to ~~either of claims 1 and 2~~ claim 1, wherein the mixture comprises (E)-2-methyl-2-butenenitrile and 3-pentenenitrile and ~~stems~~ is produced from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst or from the isomerization of 2-methyl-3-butenenitrile or from a reaction of 3-pentenenitrile with hydrogen cyanide over a hydrocyanation catalyst.

10. (Original) The process according to claim 9, wherein the proportion of 3-pentenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenenitrile isomers in the mixture, and/or the proportion of (E)-2-methyl-2-butenenitrile in the mixture is from 0.1 to 99.9% by weight, based on the sum of the pentenenitrile isomers in the mixture.

11. (New) The process according to claim 2, wherein the mixture comprises 2-methyl-3-butenenitrile and 3-pentenenitrile and is produced from a reaction of 1,3-butadiene with hydrogen cyanide over a hydrocyanation catalyst.

12. (New) The process according to claim 2, wherein the mixture comprises 2-methyl-3-butenenitrile and (Z)-2methyl-2-butenenitrile and is produced from an isomerization of 2-methyl-3-butenenitrile.

13. (New) The process according to claim 2 wherein the mixture comprises cis-2-pentenenitrile and 3-pentenenitrile and is produced from a reaction of 3-pentenenitrile with

hydrogen cyanide over a hydrocyanation catalyst.

14. (New) The process according to claim 2, wherein the mixture comprises (E)-2-methyl-2-butenenitrile and 3-pentenenitrile and is produced from a reaction of 1, 3-butadiene with hydrogen cyanide over a hydrocyanation catalyst or from the isomerization of 2-methyl-3-butenenitrile or from a reaction of 3-pentenenitrile with hydrogen cyanide over a hydrocyanation catalyst.